

STATE OF MISSOURI MISSOURI DEPARTMENT OF NATURAL RESOURCES GEOLOGICAL SURVEY PROGRAM

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATIO	NTOD	RILL	☐ DEEPEN	N PLU	IG BACK	FOR AN	OIL WELL	☐ OF	R GAS WELL	
NAME OF COMPANY OF	ROPERATO	R					DATE			
Osborn Energy, LLC					10/20	10/20/2006				
ADDRESS				CITY		STATE		PCODE		
24850 Farley				Bucyrus		KS	66013			
DESCRIPTION O	OF WEL	L AND L	EASE		WELL NUMBER		ELEVAT	ION (GROUP	ND.	
							ELEVATION (GROUND			
Osborn WELL LOCATION				(GIVE FOOTAG	45-16 GE FROM SECTION LIN	(ES)	990'			
71222 45 07 17 15 17	-)145 ft	from North		ne 330 ft. from		West section li	ne		
WELL LOCATION		. 140 11.	HOLL MOULT	_ South Section in	LATITUDE	LONGITUDE	COUNT			
Sec. 16 Towns	hip 43 1	North I	Range 33 T F	ast 🖾 West			Cass			
NEAREST DISTANCE					E LINE 495 FEET					
DISTANCE FROM PE						OR WELL ON	THE SAME LEASE	330 FEE	T	
PROPOSED DEPTH			CONTRACTOR, NAME							
600'		Obborn	Energy, LLC			air		11/06/2006		
NUMBER OF ACRES IN	EASE			SE INCLUDING THE	S WELL, COMPLET	ED IN OR DRIL	LING TO THIS RE	SERVOIR	8	
4000				VELLS ON LEASE N						
							NO. OF WELLS	PRO	DUCING	
IF LEASE PURCHASI	ED WITH C	NE OR M	ORE WELLS DRILL	ED, FROM WHOM	PURCHASED?		NO. OF WELES		ECTION	
NAME								IN	ACTIVE	
ADDRESS								ABAN	IDONED	
STATUS OF	BOND	1	SINGLE WELL	L	☐ BLAN		☐ ON FILE			
			AMOUNT \$			UNT \$ 34000		O ATTACHE RODUCING/INJECTION ZONE AND EX		
			NG PROGRAM		APPROVED CASING - TO BE FILLED IN BY STATE GEOLOGIST					
AMOUNT	SIZE		WT/FT	CEMENT	20'	SIZ		NTIFT CEMENT Portland to Sur		
20'	7"		to surface to surface		600'	2 7/0			10~1/2NQ 10 JUT	
600'	2 //8			to surface	600	7 8				
I, the Undersigne										
report, and that the				y supervision ar	nd direction and	that the fact	s stated therei	n are true	e, correct, and	
SIGNATURE		1//	Λ 1				DATE			
7	11,	11	s I to				19	A 2	5 2006	
PERMIT NUMBER	un	NY	1.100	-			0	1 6	5,200	
	20	771		DRILLER'S LOC			E-LOGS REQUIR			
APPROVED DATE	1 1	21			IS REQUIRED IF RU	JN 🗆	DRILL SYSTEM T	EST INFO	REQUIRED IF RUN	
	- The state of the	06	A	SAMPLES REC						
APPROVED BY	N.		The state of the s	SAMPLES NOT						
1 Jane	90		MISSON	WATER SAMPL						
NOTE T	HIS PER	MITNO	TRANSFERA	ABLETO ANY C	THER PERSON	OR TO AN	Y OTHER LO	CATION		
APPROVAL OF THIS I			AND GAS COUNC		STITUTE ENDORSE	MENT OF THE	GEOLOGIC MER	ITS OF TH	E PROPOSED	
, Agent of the Ol	ELLC (C	ompany	y), confirm that a	an approved dril	ling permit has b a permit number	een obtaine and signatu	ed by the owner	r of this	well. Council il representative.	
DRILLER'S SIGNATURE	V	1	1				DATE	Λ		
2/1	y H	# 1	/				^	# 7.	5,2006	
11	droll	(1)	. len	~				1 2	, acc	



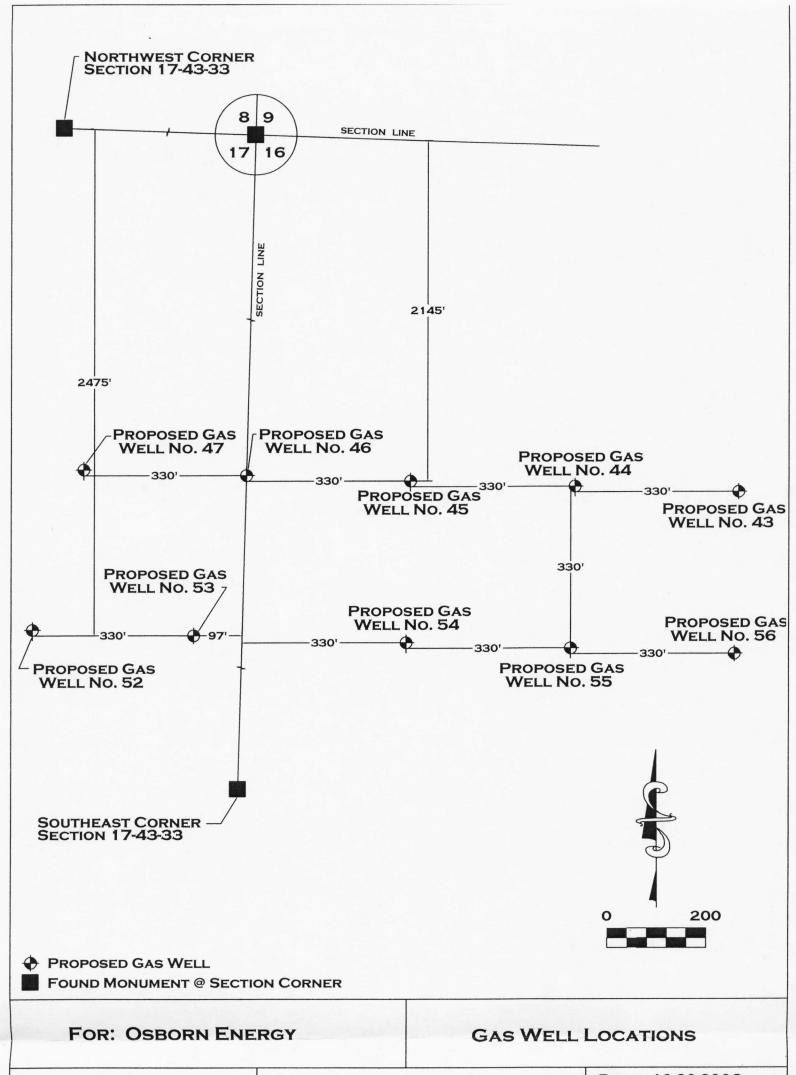
1.9.2009

STATE OF MISSOURI
MISSOURI DEPARTMENT OF NATURAL RESOURCES
GEOLOGICAL SUBVEY PROGRAM

FFB 13 2009

FORM OGC-5

GEOLOGICAL SURVEY PROGRAM WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG NEW WELL ☐ WORKOVER ☐ DEEPEN ☐ PLUG BACK ☐ INJECTION ☐ SAME RESERVOIR HOIFFERENT RESERVOIR NOIL ☐ GAS ☐ DRY OWNER ADDRESS Osborn Energy, LLC 24850 Farley, Bucyrus, KS 66013 LEASE NAME WELL NUMBER Osborn 45-16 LOCATION OF WELL SEC TWN RNG OR BLOCK AND SURVEY LATITUDE LONGITUDE Sec. 16 Twp 43 North, Rng 33 ☐ East ☐ West OR 2145 ft. from ☐ North ☐ South 330 ft. from ☐ East ☐ West PERMIT NUMBER (OGC-3 OR OGC-31) Cass DATE SPUDDED DATE TOTAL DEPTH REACHED DATE COMPLETED READY TO PRODUCE OR INJECT ELEVATION (DF, RKR, RT, OR Gr.) ELEVATION OF CASING HD. FEET **FLANGE** 12/12/2006 12/13/2006 12/28/2006 990 **FEET** TOTAL DEPTH PLUG BACK TOTAL DEPTH 518 PRODUCING OR INJECTION INTERVAL(S) FOR THIS COMPLETION ROTARY TOOLS USED (INTERVAL) CABLE TOOLS USED (INTERVAL) 0 TO 518 455-462 DRILLING FLUID USED air WAS THIS WELL DIRECTIONALLY DRILLED? WAS DIRECTIONAL SURVEY MADE? WAS COPY OF DIRECTIONAL SURVEY FILED? DATE FILED ⊠ No Yes \bowtie No Yes Yes ⊠ No TYPE OF ELECTRICAL OR OTHER LOGS RUN (JUST LOGS FILED WITH THE STATE GEOLOGIST) DATE FILED Gamma Ray Neutron **CASING RECORD** CASING (REPORT ALL STRINGS SET IN WELL - CONDUCTOR, SURFACE, INTERMEDIATE, PRODUCING, ETC. **PURPOSE** SIZE HOLE DRILLED SIZE CASING SET WEIGHT (LB. FT) **DEPTH SET** SACKS CEMENT AMOUNT PULLED 7" Surface 9 1/2" 17 20' 6 1/2" Production 6 3/4" 2 7/8" 504 97 **LINER RECORD TUBING RECORD** SIZE BOTTOM INCH FFFT FEET INCH FFFT FEET FEFT PERFORATION RECORD ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD AMOUNT AND KIND OF SIZE AND TYPE DEPTH INTERVAL **DEPTH INTERVAL** NUMBER PER FEET MATERIAL USED 455-462 2 2" DML RTG 50gal 15% HCL/ 3500# 455-462 **INITIAL PRODUCTION** PRODUCING METHOD (INDICATE IF FLOWING, GAS LIFT, OR PUMPING - IF PUMPING, SHOW SIZE AND TYPE OF PUMP.) DATE OF FIRST PRODUCTION OR INJECTION Pumping 1 1/2" insert bbl **11**/28/2006 OIL PRODUCED DURING GAS PRODUCED DURING TEST WATER PRODUCED DURING OIL GRAVITY DATE OF TEST HOURS TESTED **CHOKE SIZE** 24 MCF API (CORR.) 2 BBLS 2 BBLS TUBING PRESSURE CASING PRESSURE CALCULATED RATE OF OIL GAS WATER GAS OIL RATIO PRODUCTION PER 24 HOURS 2 BBLS **O**MCF 2 BBLS DISPOSITION OF GAS (STATE WHETHER VENTED, USED FOR FUEL OR SOLD) METHOD OF DISPOSAL OF MUD PIT CONTENTS Let water evaporate, then fill pit with a backhoe CERTIFICATE: I, the Undersigned, state that I am the Agent of the OELLC (Company), and that I am authorized by said company to make this report, and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.





JOHN RENNER

LAND SURVEYOR
6247 BROOKSIDE BOULEVARD
SUITE 204
KANSAS CITY, MO 64113
816-333-8841

NOTES:

THIS IS NOT A BOUNDARY SURVEY. IT IS FOR PROPOSED GAS WELL LOCATION.

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NOV 0 1 2006

Mo Oil & Gas Council

DATE: 10-20-2006

Joв No.: 10-06-024



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Geological Report

FEB 13 2009

Mo Oil & Gas Council

Osborn 45-16

Section 16-T43N-R33W Cass Co., Missouri Permit #20771 Elevation:

Drilling Contractor: Osborn Energy, LLC

Spud 12-12-06

Total Rotary Depth: 518' on 12-13-06

Formation	Driller Log Tops	Datum
Anna Shale (Lexington)	384'	
Summit Shale	429'	
Mulky Coal/Shale	449'	
Squirrel Sand	453'	
Total Depth	518'	

453-456 SS: clear, grey, shaly, fine grained, angular to sub-rounded, moderately sorted, weak show of free oil

456-462 SS: clear, brown oil stain, fine grained, angular to sub-rounded, moderately sorted, slightly micaceous, strong odor, free oil

462-464 SH: grey, sandy, no show

Total Depth 518' on 12-13-06

Brief Summary

Lexington Small open flow

Squirrel Sand 9' of pay, moderate bleed

CEMENTING WORK ORDER

CONSOLIDATED OIL WELL SERVICES, INC. Phone (620) 431-9210 Chanute, Kansas 66720

	DAY		Monday 12/18/2006 Month / Day / T	
NAME OF CUSTOM	ER:			
LEASE # Osborn JOB DESCRIPTION			45	
PIPE SIZE: 2	7/8	_SIZE OF	HOLE:	6 1/4
DEPTH OF WELL:			518	
TYPE OF RIG:	AIR	MUD		
AMOUNT OF CEME	NT NEED	ED:	97 sks	50/50 Poz
% OF GEL NEEDED	:		2%	
MATERIALS:		95 sks	ooz, 365# gel	
TRUCKS: VAC		ORT		
	506-FM, 3	68-MM, 12	2-RB	
OPDED TAKEN BY:		lim Grad		

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FEB 13 2009

Mo Oil & Gas Council

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TICKET NUMBER

CONSOLIDATED OIL WELL SERVICES, INC. P.O. BOX 884, CHANUTE, KS 66720 320-431-9210 OR 800-467-8676

FEB 13 200 COCATION O XX ama KS FOREMAN Fred Made

TREATMENT REPORT & FIELD TICKET

				CEMEN		T TOWNSHIP T	DANCE	COUNTY
DATE	CUSTOMER#		NAME & N		SECTION	TOWNSHIP	RANGE	
12-18-06	6073	Osbor	x # 6	15	and the second s		teriffication and the second	Cass ma
CUSTOMER			-		TRUCK#	DRIVER	TRUCK#	DRIVER
Shorn French AA							THOUSE W	Diviver
		, 0			-506	Fremad		
248	50 Fa	rley	ZIP CODE		368	Maxmad		
CITY		1		_	122	Rod Boss		
Bucy		KS	6601		5		- 27	& EUE
	ong string		614		518	CASING SIZE & W		8 KUL
CASING DEPTH	4504	DRILL PIPE		TUBING			OTHER	01
SLURRY WEIGH		SLURRY VOL			k	RATE 48	CASING A/Z	prog
DISPLACEMENT		DISPLACEMENT		MIX PSI				1.1
REMARKS: C	heck Co	sins de	oth i	u/measur	ing lines	Estab		icu lation
mix	+-Pump	2004	Pre	mium a	Flush	. mix ++	ump 97	
50/	OD Pon 1	nix Cama	ent	2% Gel	Comen	to Sur	face. F	lush
	no + lix	us ale	an.	Displa	ce 23'r	ubber Plu	is to Ca.	sing
-	Sw/ 31	BBL Fr	esh	water, f	Pressur	e to 60	8 # PSI	
S	hutin	Casing				1		
		0				Full!	Made	
C.,	s tomes	Supplies	1 Wa	tes				
ACCOUNT	QUANTITY	Y or UNITS		DESCRIPTION of	SERVICES or PR	ODUCT	UNIT PRICE	TOTAL
CODE	407							800
5401		-	PUMP CH	7	and the same of th			3/50
5406			-	Pump True		vells. 368		3/2
5407A	4	1.122570	n Ton	nmileas		122		216 43
1124		953K3	50/5	TO Por mi	x Comen's	L TOTAL		84075
11181	2	165 d	Pres	nium 6	1			5110
4402		1	2%	Rubber	Plug			2000
					0			
					C.4 1	T-4-0		195978
	ļ				30	Total		11-1
						@ 6.8%		62,00
					104	(O) (a . O /O		
	-							
	 							
	 						SALES TAX	

TITLE (US# 21/151

AUTHORIZATION